THE FOLLOWING ARE THE ENGLISH TRANSLATION OF ANNEXES TO THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT (ARTICLE 34):

Amended Sheets (43-45)

characterized in that

W is a radical of the general formula (4):

where u is a divalent group selected from radicals of the formulae (5a), (5b) and (5c)

$$R^{24}$$
 R^{25}
 R^{26}
 R^{27}
 R^{24}
 R^{25}
 R^{26}
 R^{27}
 R^{27}
 R^{24}
 R^{25}
 R^{26}
 R^{27}
 R^{27}

in which R^{24} , R^{25} , R^{26} and R^{27} are the same or different and are each as defined for R^1 , and the a and b positions serve as attachment points.

9. The process as claimed in claim 8,

characterized in that

two adjacent R²⁴ to R²⁷ radicals together form a fused substituted or unsubstituted, aromatic, heteroaromatic, aliphatic, mixed aromatic-aliphatic or mixed heteroaromatic-aliphatic ring system.

10. The process as claimed in one of claims 3 to 9,

characterized in that

R represents radicals of the general formulae (6a), (6b) and (6c):

$$R^{28}$$

$$n(x)$$

$$R^{29}$$

$$m(x)$$

$$m(x$$

where R^{28} and R^{29} are the same or different and are each as defined for R^1 , x, y, z and W are each defined as specified and m=0 or 1, n=0 or 1, k=0 or 1, l=0 or 1, and the position a serves as the attachment point.

- 11. The process as claimed in one of claims 1 to 10, characterized in that the metal of groups 4 to 10 of the Periodic Table is rhodium, platinum, palladium, cobalt or ruthenium.
- 12. The process as claimed in one of claims 1 to 11, characterized in that further phosphorus ligands are present.
- 13. A process for hydrocyanation, isomerization of olefins or amidocarbonylation in the presence of heteroacylphosphines of the formula (1) or metal complexes thereof, where R¹, R², R³, R⁴ and q are the same or different and are each a substituted or unsubstituted aliphatic, alicyclic, aromatic, heteroaromatic, mixed aliphatic-alicyclic, mixed aliphatic-aromatic, heterocyclic, mixed aliphatic-heterocyclic hydrocarbon radical having from 1 to 70 carbon atoms, H, F, Cl, Br, I, -CF₃, -CH₂(CF₂)_jCF₃ where j = 0-9, -OR⁵, -COR⁵, -CO₂R⁵, -CO₂M, -SiR⁵₃, -SR⁵, -SO₂R⁵, -SOR⁵, -SO₃R⁵, -SO₃M, -SO₂NR⁵R⁶, -NR⁵R⁶, -N=CR⁵R⁶, where R⁵ and R⁶ are the same or different and are each as defined for R¹, and M is an alkali metal ion, formally half an alkaline earth metal ion, an ammonium or phosphonium ion, x, y, z are each independently O, NR⁷, S, where R⁷ is as defined for R¹.

14. A process for carbonylation in the presence of a heteroacylphosphite of the formula (1)

$$R^2$$
 R^3
 R^4
 R^4
 R^4

or metal complexes thereof,

where R¹, R², R³, R⁴ and q are the same or different and are each a substituted or unsubstituted aliphatic, alicyclic, aromatic, heteroaromatic, mixed aliphatic-alicyclic, mixed aliphatic-aromatic, heterocyclic, mixed aliphatic-heterocyclic hydrocarbon radical having from 1 to 70 carbon atoms, H, F, Cl, Br, I, $-CF_3$, $-CH_2(CF_2)_iCF_3$ where j = 0.9, $-OR^{5}, -COR^{5}, -CO_{2}R^{5}, -CO_{2}M, -SiR^{5}_{3}, -SR^{5}, -SO_{2}R^{5}, -SOR^{5}, -SO_{3}R^{5}, -SO_{3}M, -SOR^{5}_{3}, -SOR^{5}_{3}$ -SO₂NR⁵R⁶, -NR⁵R⁶, -N=CR⁵R⁶, where R⁵ and R⁶ are the same or different and are each as defined for R¹, and M is an alkali metal ion, formally half an alkaline earth metal ion, an ammonium or phosphonium ion, x, y, z are each independently O, NR⁷, S, where R⁷ is as defined for q, and x, y, z are not simultaneously O, with the proviso that when q has a radical which has a structural unit (6c)

(1)

$$R^2$$
 R^3
 X^1
 X^1
 X^1
 X^2
 X^3
 X^4
 X^4

x must not be N when T is NR³⁰.

where the R¹ to R⁴ radicals are each as defined for formula (1), x¹, y¹, z¹ are each independently O, NR⁷, S, where R⁷ is as defined for q, T is an oxygen or an NR³⁰ radical, where R³⁰ is as defined for q, and the a position serves as the attachment point, x and x¹ must not simultaneously be N and